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L. C. HAYNE, President.
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THOS. J. ADAMS PROPRIETOR.

EDGEFIELD, S. C. WEDNESDAY, FEBRUARY 15, 1899.

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A WEATHER SONG OF HOPE.

The rain is in the valley, the mist is on the hill,
But the soul is in the sunshine, and the heart
Is happy still.
For love is ever springtime, and knows not
The wintry chill.
And the world will be brighter in the morning!

The river has no music as it ripples to the sea,
But the soul is in the sunshine, and as happy
As can be.
For love is ever springtime, and the blossoms
Are blowing free.
And the world will be brighter in the morning!

Oh, love it is that leads us from the sorrow
Of the night
To the beauty of the morning—to the splen-
dor of the light.
And every garden blossoms, and every eye
Is bright,
And the world will be brighter in the morning!

A FIREPROOF MAN.

BY ADDISON P. MUNROE.

My horse had cast a shoe, and I stopped for repairs at a blacksmith's shop in Lime Rock, a quaint little hamlet in the northern part of one of our New England States. The village, a couple of miles distant from the nearest railroad, consists of the post-office, smithy and a baker's dozen of rural dwellings; a pretty and peaceful place with rustic views that a man accustomed to the bustle of city life can fully appreciate.

While waiting for my horse to be shod, I learned that a few rods further on, over the crest of the hill, were the famous lime kilns. I had heard of the kilns at Lime Rock since my boyhood, but I had never dreamed to come that way before, so, telling the blacksmith that I would return for my horse soon, I strolled over the hill to investigate.

I was met by the kiln-tender, a strong, robust man about 50 years of age, who welcomed me cordially and volunteered to show me the modus operandi of the affair, which he did thoroughly. I can remember that when he flung the big iron door of his furnace open with the words, "This fire burns night and day and never goes out," although I was ten feet away from the door, I was glad to see my face with my hands from the terrible heat; and yet, as if the fire were not hot enough, he commenced to throw on great sticks of cord wood, which he placed in the furnace. Having finished the inspection of the place, I was about to thank him and withdraw, when I chanced to make the remark that in this quiet little village of Lime Rock one could forget all the cares of life, all its excitements and tragedies.

"Young man," he said, "for 15 years I have burnt lime in this place, and although my previous years were spent in far more exciting places, yet the nearest approach to a terrible tragedy happened to me in this same place."

"I hastened to assure him that I should feel honored if he would favor me with the particulars of his adventure. Offering me a stool and filling and lighting a pipe, he told me the following tale:

"It will be ten years ago the 15th of next December that the exciting incident in which I figured occurred. As I have already explained to you, we have a gang of men here through the day, but only one man through the night, his duties being to tend the fire and draw the lime, which latter is done three times in each 24 hours. I was then the night man and was on duty on the 15th of December of which I speak.

"It was a cold, clear moonlight night about 10 o'clock. I was alone, the last longer having gone home, and I had just replenished the great fire, when the latch was lifted, and a stranger walked in. He was a tall, muscular, well-built man, I should say about 40 years of age, clad in a large overcoat and wearing a silk hat; he had a fine, intellectual face, with flowing side whiskers and sharp black eyes; eyes that seemed to have the faculty of looking beneath the surface. In fact, they attracted my attention almost before I observed his features.

"Now I like company in the long winter nights, and as I pushed forward a stool, he bade him a cordial 'good evening.'"

"Good evening," he returned pleasantly, and throwing off his overcoat he seated himself opposite to me.

"I do not often have callers at night," I said, "but they are always welcome."

"Well," he replied, "the fact is I am walking down to the station to take the midnight train to P—." As I had plenty of time and saw the reflection of your fire I thought I would drop in, get warm and have a chat with you before finishing my walk."

"Well, he was a good talker, and we passed pleasantly, and after we had conversed some 20 minutes I had learned that he was a professor of chemistry in B— university in P—, and that he was an enthusiast in his profession.

"Suddenly he asked me if I would let him see my fire. I stepped around and threw open the big furnace door; the heat was intense, but although he stood within three feet of the open door, unlike most visitors, he neither moved away nor seemed to pay any attention to it, but drew nearer, if anything, with his sharp, black eyes fixed intently on the flames.

"Shutting the door I said: 'You are different from most people, professor; everyone cannot stand the heat as you did.'"

"I should be able to stand it," he replied, "has been the study of my life."

"He paced back and forth excitedly, his fingers working convulsively, and his eyes still fixed on the furnace door. The sight of that fire had had a strange effect on him.

had relapsed into a sullen fit, into their carriage, the men bade me good night and drove away, and I never set eyes on the 'professor' again. Yes, you may rest assured I never forget the 15th of December."

Thanking him for his story I bade the kiln-tender good-by and left him piling the wood on his great fire, which threw a lurid glow on the interior of his shed. —Waverley Magazine.

AN OBITUARY QUILT.

Queer Donation by the Women of Maine Parish to Their Pastor's Wife.

"Many queer gifts come to the minister of a New England country church at the annual donation visit of his parishioners, but the oddest and creepiest thing of the kind that I ever knew of I encountered once in northern Maine," said A. E. Stetson, a member of a New York publishing firm.

"I was a book canvasser then, selling religious works, and I stayed one night at the house of a Baptist preacher in the town of Monson, since the development of his slate quarries. The preacher was a man of deep emotion, known far and wide for his unworldliness and apostolic piety, and his wife was a notable housekeeper. There was a good supper, and at 9 o'clock in the evening prayers, these over I went to bed in the best room and, after the day's hustling, slept soundly.

"Waking in the bright morning sunlight my attention was attracted by the odd pattern of the quilt which served as counterpane on my bed. It was a patchwork quilt, made in large squares, and on every square was a lettering worked in black worsted. In the square immediately before my eyes I spelled out the words: 'Sacred to the memory of Solomon Tubbs. Died Oct. 8, 1867.' In the next square was inscribed: 'In memory of Martha Phillips. Born June 11, 1833. Died Jan. 14, 1864.' On every square was an obituary notice couched in a style similar to the first one that I read, and they covered a time running from 1851 to 1867. The quilt, which I learned afterward, was presented to the pastor's wife by the women of her husband's congregation, combined the utilities of a counterpane with the record of deaths in the parish for a term of sixteen years. That it was spread in the best chamber showed that it was reserved for guests as a mark of high consideration.

"At first sight the memento mori character of the inscriptions was a trifle appalling to a man just awakened. But being a guest at the same house for some subsequent nights I got used to the obituary quilt and even derived a certain enjoyment from studying out the inscriptions of mornings before I got up from bed. So familiar did I become to my present position in the metropolis." —New York Herald.

THE SERENADE.

It is the confession of the young man himself, a Detroitian who went to a country village in the state to learn business in a general store.

"I do not mean to say that there were some good players and we organized a string band. I can't perform of anything more difficult than a jew's harp, but I was promoter, organizer, conductor and all that, so they named the band after me. We never played for money, but went to the houses of friends, where we always had pleasant entertainment, or took later turns at serenading. We were out on the last errand one night when I took the band to one of the largest and most pretentious homes in the town. It was brilliantly lighted up, and we played our catchiest selections, but there was no response. We went away mad, but finally gave the family the benefit of the doubt, and went back later, but with no better result.

"Next morning I was busy at the store when the village physician, an old school gentleman, came in and, lifting his hat and said, 'Good morning, doc,' and intimated that I might send in a bill if I wanted to. I was dumfounded, for a nodding acquaintance was all I had with the doctor and the idea of his being so deferential was incomprehensible to me. There appeared to be a rush of customers that morning, and they all wore a peculiar smile that I could not interpret. At last I got hold of the little daily published there. It told of the serenade at the big house, concluding with the thanks of the doctor and the family, and the assurance that mother and son were both doing well. The band never met again and they named the boy Dewey." —Detroit Free Press.

QUAINT AND CURIOUS.

Cloth is now being successfully made from wood.

The Scotch thistle is growing in Greece, although there it is called the artichoke.

In the eighteenth century Polish ladies obliged their daughters to wear little bells in order to proclaim where they were all the time.

In Siberia, if a man is dissatisfied with the most trifling acts of his wife, he tears a cap or veil from her face, and that constitutes a divorce.

An eminent man of science has recently declared that red-haired people are far less apt to grow bald than those who are possessed of other colored hair.

There are parts of Spain where the hat is unknown except in pictures. The men, when they need a covering, tie up their heads, and the women use flowers.

In Abyssinia the murderer is delivered into the hands of the relatives of his victim, who kill him in the same manner in which he committed the murder.

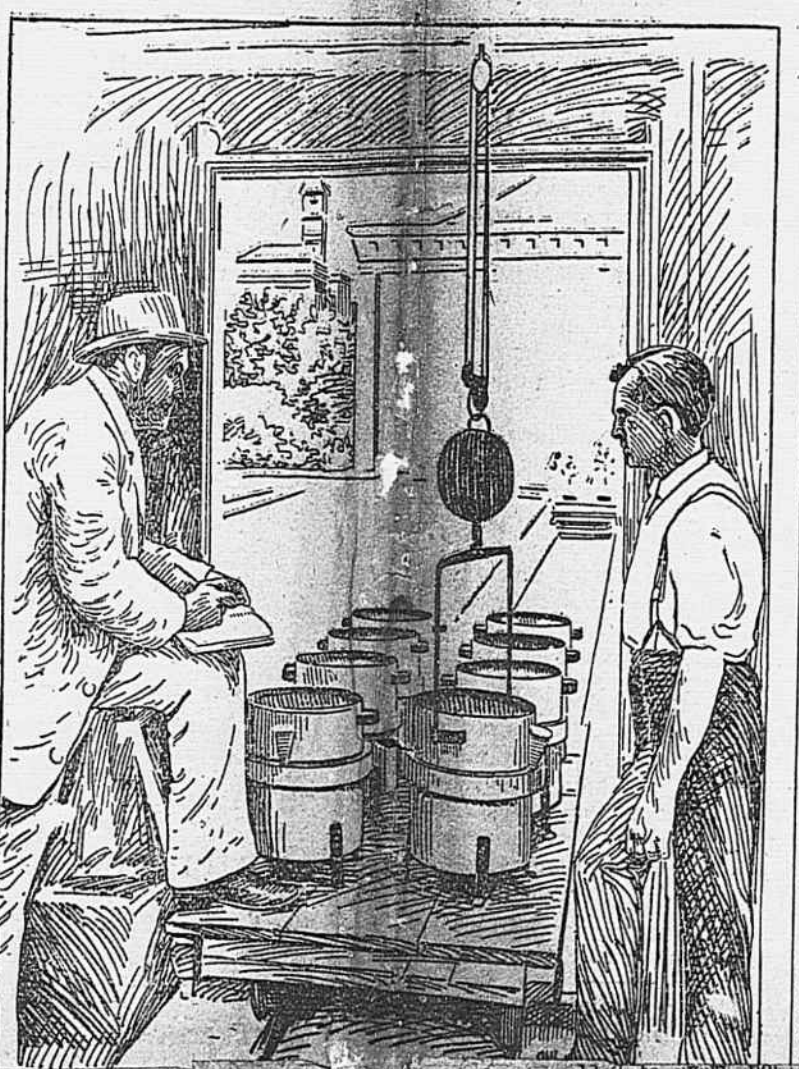
Some of the petrified wood found in Arizona is said, so hard that steel tools will not work it, the petrifications being only three degrees less in hardness than the diamond.

In the island of New Britain a man must not speak to his mother-in-law. Not only is speech forbidden to his relative, but she must be avoided; and if by chance the lady is met, the son-in-law must hide himself or cover his face.

TYPICAL SCENES AT THE DEPARTMENT OF AGRICULTURE

STUDYING SAMPLE SOILS.

The Department of Agriculture in Washington has been wise in retaining during several successive administrations its able Chief of the Division of Chemistry. The result has been, declares the Scientific American, from which this article is taken, that during the years of his tenure of office, Dr. Harvey W. Wiley has been able to plan and complete several valuable series of experiments. None of these, perhaps, has occupied his closer interest and attention more than those which have had for their object the study of the growth of various plants under similar conditions but with varying soils.



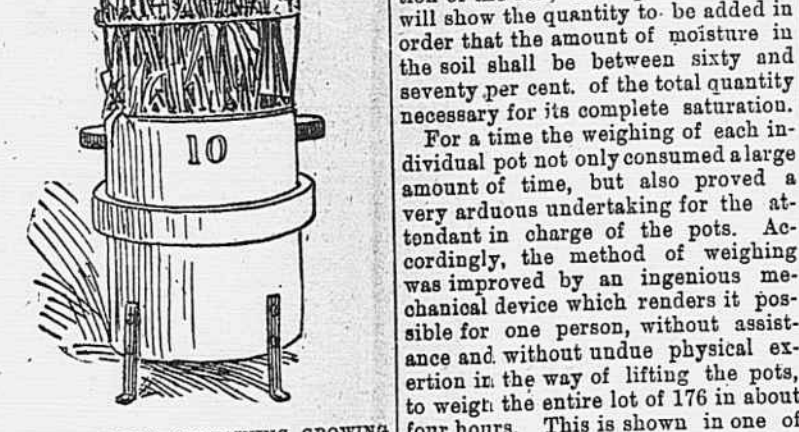
ount of water added to every pot must be known (so that the conditions may be identical), this improved method makes it possible to add one portion of water to each of the pots in the course of two hours. This is accomplished by inserting the tin funnels containing water in the funnel holder on the side of the pot, as shown in the illustration.

Next perhaps in importance to the addition of water to the soil is the determination of the amount of moisture contained in the pot at any given period. For a long time this factor was determined chiefly by an inspection of the surface, with an occasional weighing of the pot. This method, while capable of yielding excellent results when under the immediate supervision of an expert, was frequently interrupted, owing to the absence of Dr. Wiley, who was liable to be called elsewhere by other duties. Accordingly, it was deemed advantageous to have a more rigid control of the quantity of moisture present. Consequently, weekly weighings of the pots are now made, so that the quantity of moisture which has been evaporated during the seven days may be directly determined. Knowing the quantity necessary to produce complete saturation of the soil, a simple calculation will show the quantity to be added in order that the amount of moisture in the soil shall be between sixty and seventy per cent. of the total quantity when the pot is first weighed.

For a time the weighing of each individual pot not only consumed a large amount of time, but also proved a very arduous undertaking for the attendants in charge of the pots. Accordingly, the method of weighing was improved by an ingenious mechanical device which renders it possible for one person, without assistance and without undue physical exertion in the way of lifting the pots, to weigh the entire lot of 176 in about four hours. This is shown in one of the accompanying illustrations, which is also of special interest in showing Dr. Wiley himself in the act of writing down the weights.

The single-column illustration shows the screen or hood that has been devised for the purpose of protecting the plants from the action of the wind and from the attacks of birds.

The laboratory work includes determinations of the total amount of dry matter produced in each pot, together with the amounts of nitrogen, phosphoric acid, and potash removed from the soil by each crop. The data from seven seasons is now at hand, and the



Bennett Lawes, who for more than half a century have had charge of the scientific work in that place.

Typical soils from between thirty and forty places scattered throughout the United States were procured through the agencies of the Department of Agriculture, and a direct comparison was instituted with samples of

soils of known constituents obtained from Rothamsted.

A plot of ground in the rear of the main building of the Agricultural Department at Washington was set aside

for these experiments, which were begun in 1892, and a small green-house erected in which the plants are kept during the night and in rainy weather, but at other times they are rolled out into the air. This is easily accomplished, as the pots are all on trucks which may be moved at will along the tracks, as shown in the illustrations.

For a portion of the season oats and beans were grown in duplicate samples of typical soils. After the crops from these plants had been harvested, the soil in the pots was again prepared for planting, and a crop of buckwheat grown. By this means two crops are secured during each season, so that the value of the experiment is largely increased, in consequence of duplication of the data obtained.

Very careful attention is naturally given to the water supplied to the pots, and formerly at proper intervals a certain amount of distilled water was added to the soil by means of glass measuring vessels, but as the work progressed, these have been discarded and a number of tin vessels, each holding two pounds of distilled water, have been substituted. As the

preparation of a preliminary report is under way. It will contain statements in regard to the composition of the soils, their physical character, their water-holding capacity, their contents of humus, and the percentage of nitrogen, phosphoric acid, and potash contained therein, both as regards total content and in respect of the quantities removed by different solvents. This report will be illustrated, not only by analytical tables, but also graphically in such a way as to show in the most evident manner the relation which exists between the physical composition of the soil, its contents of moisture, and the quantity of dry organic matter produced.

This is but one of several investigations now being conducted under the direction of the Chief of the Chemical Division of the Department of Agriculture. The great value to the farmer is obvious, for as a result of this investigation a chemical analysis of a given soil will at once determine if the plant foods may be deficient in it for the production of a given crop, and at the same time will show the farmer how to supply these deficiencies when practicable by the judicious application of fertilizers or by a suitable rotation of crops. Thus in the end it will demonstrate what crops grown on a given soil will yield the greatest amount of profit to the farmer.

The slow and even tedious work necessary for the satisfactory completion of investigations carried on in the scientific bureaus of our Government is not always appreciated by the general public, but when the results that are sure to ensue are so far-reaching in effect as those of the investigation which has just been so briefly outlined, then, indeed, does the wisdom of the work become clearly manifest.

A TREADMILL DOG.

One That Runs a Printing Press in a Wisconsin Establishment.

A dog which runs a press is a curiosity in Plymouth, Wis., and is probably the only animal in the world doing this kind of service. "Gyp," as the dog is known, is owned by the Plymouth Review Company, and not only runs off the edition of the paper once a week, but is also employed to run a large job press.

The dog is an English mastiff, weighing 150 pounds, and formerly belonged to a showman who became stranded there and left the animal in the care of the proprietors of one of the hotels. The proprietors of the Review secured him, and his tricks of operating a wheel were developed.

A wooden wheel, eight feet in diameter and four feet wide, was constructed and balanced on a shaft on the end of which was placed a pulley to drive a main shaft. This shaft was connected with a nine-column power throw the dog into a rage.

is to have any one turn the wheel, which Gyp has to look upon as his own, and second the sight of a particular cat. The latter fact is taken advantage of when the dog does not tread fast enough. A glimpse of the cat is sufficient to increase the speed of the wheel, and if the cat is

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BUTTER DOUBLES ITS WEIGHT.

New Method of Loading Discovered in California.

Some interesting experiments and analyses have been conducted by the chemists of the San Francisco health department with the result that a swindle in the adulteration of butter will be exposed in a formal report at the next meeting of the board of health. Chief Food Inspector Dockery seized samples at suspicious butter in a house on mission street, thinking that because it crumbled apart like cheese it was merely a combination of oils or oleomargarine. He was more than surprised, however, on being told by Professor Green, the chemist in charge, that the article submitted for analysis was butter and a good average sample of butter at that. There was but one peculiar characteristic in the butter—water oozed from it in large drops when the butter was spread upon bread, and when pressed with a knife upon a slab it decreased noticeably in bulk.

"How do you account for that?" Dockery asked, his question being prompted by the chemist's statement.

"By the use of a form of pepsin and alkalis and salt the butter is emulsified, or made to absorb its own weight of water. For instance, in making up the butter, one pound of good butter was taken and put into a vessel with one pound of milk. A little pepsin and salts of some kind were added. Then the different ingredients were churned together, and after a little while the milk had disappeared with the chemicals, and there were two pounds of butter. This compound will retain its increased weight for a considerable time, but when exposed to the atmosphere the outer edges dry and crumble like cheese. All that can be said of the samples is that they are 'doctored butter.' They give no signs of adulteration."

"I took this stuff from F. Rexinger in his room on Mission street," said Dockery.

"They were making it in a room in the lodging houses and selling the method. Rexinger showed me a handful of twenties, and said he got them from a fellow who had bought the secret that morning for \$300."

"Rexinger came from Honolulu, and must have brought the scheme from the islands, for I never saw anything like this butter before in San Francisco. It tastes like any good butter, and one can be deceived till you see the water coming out of it from underneath a knife."

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The danger bell continues to ring until reset by a simple apparatus, which also acts as a bell tester. The safety bell rings for a couple of seconds, and shows the word "Safe" on the bell. The bell ceases to ring, in this case, as the lever ceases to oscillate, the word "Safe" disappears. —Evening Post.

Miner's Life in Sweden. Consul General Winslow of Stockholm, Sweden, writes of iron mining and the lives of miners. At the principal mines the working is carried on by hand, with steel rods, which are pounded on top with a steel-headed hammer. In these holes dynamite is placed and exploded. The amount of mixed ore and rock loosened by each kilogram (2.2 pounds) of dynamite averages twelve tons, each ton representing an average of 12.3 feet bored. The detached pieces are reduced by hammers to sizes that will admit of their being readily handled.

The ordinary miner makes on an average \$200 per annum. He generally lives in villages near the mines and goes home at the end of each week. The average working time is eleven and a half hours a day. Those who are married live in houses built for them alone, paying 40 cents for one or 80 cents for two rooms per month. The unmarried miners live in "barracks." These are one-story buildings, usually containing two apartments, each having twenty-four bunks, ranged in two rows around the sides. The rules regulating behavior, cleanliness, etc., are very strict and rigidly enforced.

Mule Meat and Mangoes. A Cuban sugar planter, now convalescing in New York City after the island campaign says: "I lived three months on mangoes. We had not a morsel of meat, but once in a while a few fishes were caught in the streams. These, however, were not very good eating. Mangoes are quite nutritious, but we all became very thin. There were no bananas to be had. It was not the season for guavas. After awhile we got some mule meat, which tastes like pork, except that it is sweet. A fat young mule or horse is fine eating. Of course, the spavined, diseased old car horse is no better than a tough bull that has been starved." —New York Press.

Man's Ingratitude to His Horse. Spokane, the horse that beat Proctor Knott in one of the finest Derbys that was ever run, winning his owner \$30,000 and the betting but bright return of the turf, has been brought back to the scene of his former triumphs and sold at auction for a paltry \$170. The horse was proud to own, now he stands the chance of becoming a miserable hack in a road-wagon. The ingratitude that men who own race-horses show to the animals which served them so well is an old story. —Louisville Courier-Journal.

Signalling to Moving Trains. For some months past there has been in successful operation on a section of twenty-five miles of one of the Chicago and North Western Railroad Company's lines an electrical being exceedingly all signals are of a contact bar fixed to the engine, so that, as the engine moves, it rocks the shaft, and, in consequence, the lever and wire with the contact bar, which is set in the box, the contact bar is raised in position to strike a lever fixed on the locomotive. This makes a complete electric circuit, sets an alarm ringing on the engine, and works an indicator.

An ingenious form of double volute spring holds the engine contact bar vertical, while allowing it to assume a horizontal position in either direction. After receiving the blow from the contact bar on the rail, it performs a few oscillations, and resumes its vertical position in readiness for the next contact. The contact bars, both on the engine and the rails, have two ends, one for danger and one for safety. The safety lever has its own independent electric circuit, and it moves an indicator on the engine.

FIFTY OTHER YEARS.

I've wandered to the city, Tom, I've hunted up the spot
Where you and I drownded chipmunks out,
In Higbee's meadow lot.
The lot is in the same place, Tom, and yet
It doesn't grow.
The rosin weed and grass we knew, just fifty years ago.

That same old patch of ground, Tom, where
Kirkbride kept his cow,
Is in a business center, and you wouldn't
know it now.
Two sixteen-story houses, Tom, are standing
there to show
How things have changed since we were
kids, just fifty years ago.

A pair of worn-out breeches, Tom, would
once have bought that lot.
I had the breeches—could have bought it
just as well as not.
And good and hard I kicked myself because
I didn't know
Enough to pound sand in a rat hole, fifty
years ago.

—Chicago Record.

HUMOROUS.

A Kansas paper, referring to a fatal accident which befell a prominent